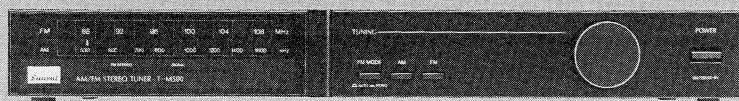


SERVICE MANUAL

AM/FM STEREO TUNER SANSUI T-M500/M500L



NOTE

T-M500 and T-M500L are additional models which external appearances are different from those of T-M55 and T-M55L.

This manual contains **OTHER PARTS LIST**, **PACKING LIST** and **ACCESSORY LIST** in which changed parts are printed with bold-face.

For other parts list, refer to T-M55/M55L service manual previously issued.

SANSUI ELECTRIC CO., LTD.

•SPECIFICATIONS

T-M500

FM Section

Tuning range..... 88 to 108 MHz
Usable sensitivity
 Mono IHF..... 10.8 dBf (1.9 μ V : T100)
 DIN..... 0.9 μ V

50 dB quieting sensitivity

Mono..... 17.0 dBf
 Stereo..... 37.0 dBf

Signal to noise ratio at 65 dBf

Mono..... 75 dB
 Stereo..... 70 dB

Distortion at 65 dBf

Mono..... less than 0.2% at 1,000 Hz
 Stereo..... less than 0.3% at 1,000 Hz

Alternate channel selectivity (at 400 kHz)

..... 55 dB

Stereo separation

..... 40 dB at 1,000 Hz

Frequency response

..... 30 to 15,000 Hz

Antenna input impedance

..... 300 ohms balanced
 75 ohms unbalanced

AM Section

Tuning range..... 530 to 1,600 kHz
Usable sensitivity..... 50 dB/m (316 μ V/m)
Signal to noise ratio..... 45 dB
Image response ratio..... 42 dB at 1,000 kHz

Others

Output voltage and impedance

..... 600 mV/2.2 kohms

Power requirements

..... 120V/220/240V

For U.S.A. and Canada 50/60 Hz

Power consumption

..... 6Watts

Dimensions

..... 345 mm (13-5/8")W

..... 46 mm (1-13/16")H

..... 234 mm (9-1/4")D

Weight

..... 2.0 kg (4.4 lbs) net
 2.6 kg (5.7 lbs) packed

T-M500L

FM Section

Tuning range..... 88 to 108 MHz
Usable sensitivity
 Mono IHF..... 10.8 dBf (1.9 μ V : T100)
 DIN..... 0.9 μ V

50 dB quieting sensitivity

Mono..... 17.0 dBf
 Stereo..... 37.0 dBf

Signal to noise ratio at 65 dBf

Mono..... 75 dB
 Stereo..... 70 dB

Distortion at 65 dBf

Mono..... less than 0.2% at 1,000 Hz
 Stereo..... less than 0.3% at 1,000 Hz

Alternate channel selectivity (at 400 kHz)

..... 55 dB

Stereo separation

..... 40 dB at 1,000 Hz

Frequency response

..... 30 to 15,000 Hz

Antenna input impedance

..... 300 ohms balanced
 75 ohms unbalanced

AM Section

Tuning range

MW..... 530 to 1,600 kHz

LW..... 150 to 350 kHz

Usable sensitivity

MW..... 50 dB/m (316 μ V/m)

LW..... 62 dB/m

Signal to noise ratio

..... 45 dB

Image response ratio

MW..... 42 dB at 1,000 kHz

LW..... 35 dB at 250 kHz

Others

Output voltage and impedance

..... 600 mV/2.2 kohms

Power requirements

..... 220/240V

..... 50/60 Hz

Power consumption

..... 6Watts

Dimensions

..... 345 mm (13-5/8")W

..... 46 mm (1-13/16")H

..... 234 mm (9-1/4")D

Weight

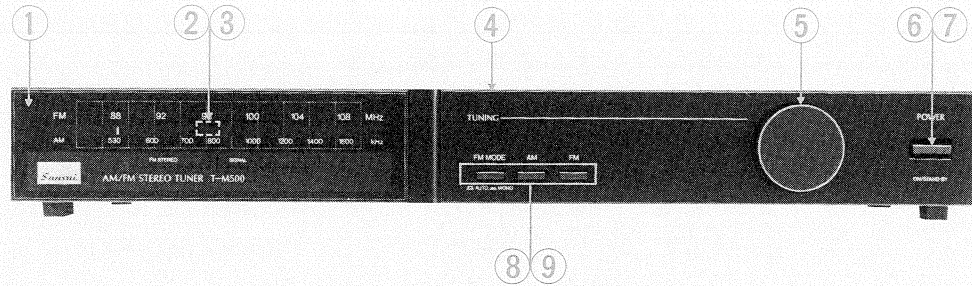
..... 2.0 kg (4.4 lbs) net
 2.6 kg (5.7 lbs) packed

* Design and specifications subject to changes without notice for improvements.

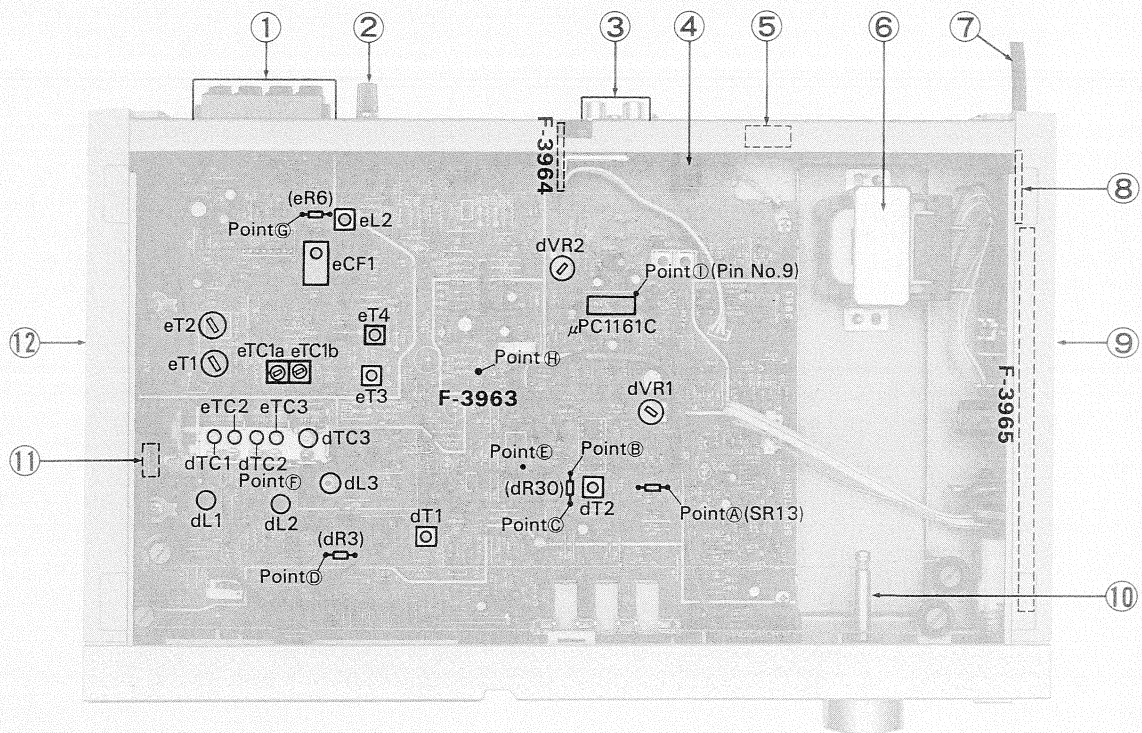
* Due to local laws and regulations, this unit sold in some areas are equipped with variable voltage selectors.

1. OTHER PARTS

1-1. Front View



1-2. Top View



Parts List <Front View>

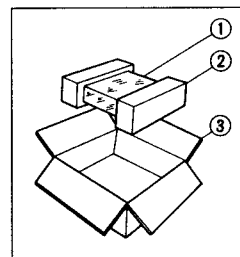
Parts No.	Stock No.	Description
1	47929000	Front Panel Ass'y for T-M500
	47929100	Front Panel Ass'y for T-M500L
2	07856500	Dial Pointer
3	46198900	L.E.D. Dial Pointer
4	47547700	Bonnet
5	47547000	Tuning Knob
6	46370900	Push SW., POWER
7	47736700	Push Knob, POWER
8	46547800	Push SW., FM/AM (Selector)•FM MODE for T-M500
	46547900	Push SW., FM/AM (Selector)•FM MODE for T-M500L
9	47547100	Push Knob, FM/AM (MW)/(LW) (Selector)•FM MODE

Parts List <Top View>

Parts No.	Stock No.	Description
1	46547300	Antenna Terminal Board (4P)
2	22301510	GND Terminal
3	46438100	Output Terminal Board (2P)
4	46547200	Mini Jack, COMPU SELECTOR
5	07204700	Slide SW., Voltage Selector < 220/240V T-M500L Only >
6	15011501	Power Transformer for T-M500 (XX,SA)
	15011502	Power Transformer for T-M500 (UL,CSA)
	15011505	Power Transformer for T-M500L (EU,BS,AS)
7	38005400	Power Supply Cord for T-M500 (XX,SA)
	38004700	Power Supply Cord for T-M500 (UL,CSA)
	38004300	Power Supply Cord for T-M500 (BS)
	07204200	Power Supply Cord for T-M500 (AS)
	38004500	Power Supply Cord for T-M500L (EU)
8	47168610	AC Cord Cover
9	47538000	Side Panel (Right)
10	47177500	Tuning Unit
11	47169300	Pulley
12	47537900	Side Panel (Left)

2. PACKING LIST

Parts No.	Stock No.	Description
1	47859400	Vinyl Cover
2	47178200	Styrofoam Packing
3	47928400	Carton Case for T-M500
	47928500	Carton Case for T-M500L



3. ACCESSORY LIST

Stock No.	Description
46980000	Operating Instruction for T-M500
46980100	Operating Instruction for T-M500L
46051700	FM Antenna
46186100	AM Loop Antenna
07563000	Antenna Holder
38103200	PJP cord
46267300	Mini Plug Cord

CAUTION

1. The symbols, UL, CSA, SA, BS, UK, EU, AS and XX (EXPORT) on the parts list and the schematic diagram mean followings respectively.

UL Manufactured for U.S.A market.
(Underwriters Laboratories approved model.)

CSA Manufactured for Canadian market.

SA Manufactured for South African market.

BS, UK Manufactured for United Kingdom market.

EU Manufactured for European market.

AS Manufactured for Australian market.

XX (EXPORT) ... Standard Version.

NON MARK Common Parts.

2. Some printed circuit boards are not supplied as the assembled.

To separate these in this service manual, the stock No's are not indicated at the ends of the board names. However, the individual parts on the circuit boards are provided by orders.

3. Since some of capacitors and resistors are omitted from parts lists in this service manual, refer to the Common Parts List for capacitors & resistors, which was issued on February 1983.

SERVICE MANUAL

AM/FM STEREO TUNER SANSUI T-M55/M55L



CAUTION

1. Use only replacement parts recommended by the manufacturer.
2. Measure insulation resistance before returning the appliance to the customer to prevent electrical shock.

Sansui

SANSUI ELECTRIC CO., LTD.

•SPECIFICATIONS

•T-M55

FM Section

Tuning range	88 to 108 MHz
Usable sensitivity	
Mono IHF	10.8 dBf (1.9 μ V : T100)
DIN	0.9 μ V

50 dB quieting sensitivity

Mono	17.0 dBf
Stereo	37.0 dBf

Signal to noise ratio at 65 dBf

Mono	75 dB
Stereo	70 dB

Distortion at 65 dBf

Mono	less than 0.2% at 1,000 Hz
Stereo	less than 0.3% at 1,000 Hz

Alternate channel selectivity (at 400 kHz)

Stereo	55 dB
--------	-------

Stereo separation

Stereo	40 dB at 1,000 Hz
--------	-------------------

Frequency response

Stereo	30 to 15,000 Hz
Mono	+1.0 dB, -1.5 dB

Antenna input impedance

Stereo	300 ohms balanced
Mono	75 ohms unbalanced

AM Section

Tuning range	530 to 1,600 kHz
Usable sensitivity	50 dB/m (316 μ V/m)
Signal to noise ratio	45 dB
Image response ratio	42 dB at 1,000 kHz

Others

Output voltage and impedance	600 mV/2.2 kilohms
Power requirements	120/220/240V
For U.S.A. and Canada	120V (60 Hz)
Power consumption	6W
Dimensions	345 mm (13-5/8") W
H	46 mm (1-13/16")
D	234 mm (9-1/4")
Weight	2.0 kg (4.4 lbs) net
Packed	2.6 kg (5.7 lbs)

•T-M55L

FM Section

Tuning range	88 to 108 MHz
Usable sensitivity	
Mono IHF	10.8 dBf (1.9 μ V : T100)
DIN	0.9 μ V

50 dB quieting sensitivity

Mono	17.0 dBf
Stereo	37.0 dBf

Signal to noise ratio at 65 dBf

Mono	75 dB
Stereo	70 dB

Distortion at 65 dBf

Mono	less than 0.2% at 1,000 Hz
Stereo	less than 0.3% at 1,000 Hz

Alternate channel selectivity (at 400 kHz)

Stereo	55 dB
--------	-------

Stereo separation

Stereo	40 dB at 1,000 Hz
--------	-------------------

Frequency response

Stereo	30 to 15,000 Hz
Mono	+1.0 dB, -1.5 dB

Antenna input impedance

Stereo	300 ohms balanced
Mono	75 ohms unbalanced

AM Section

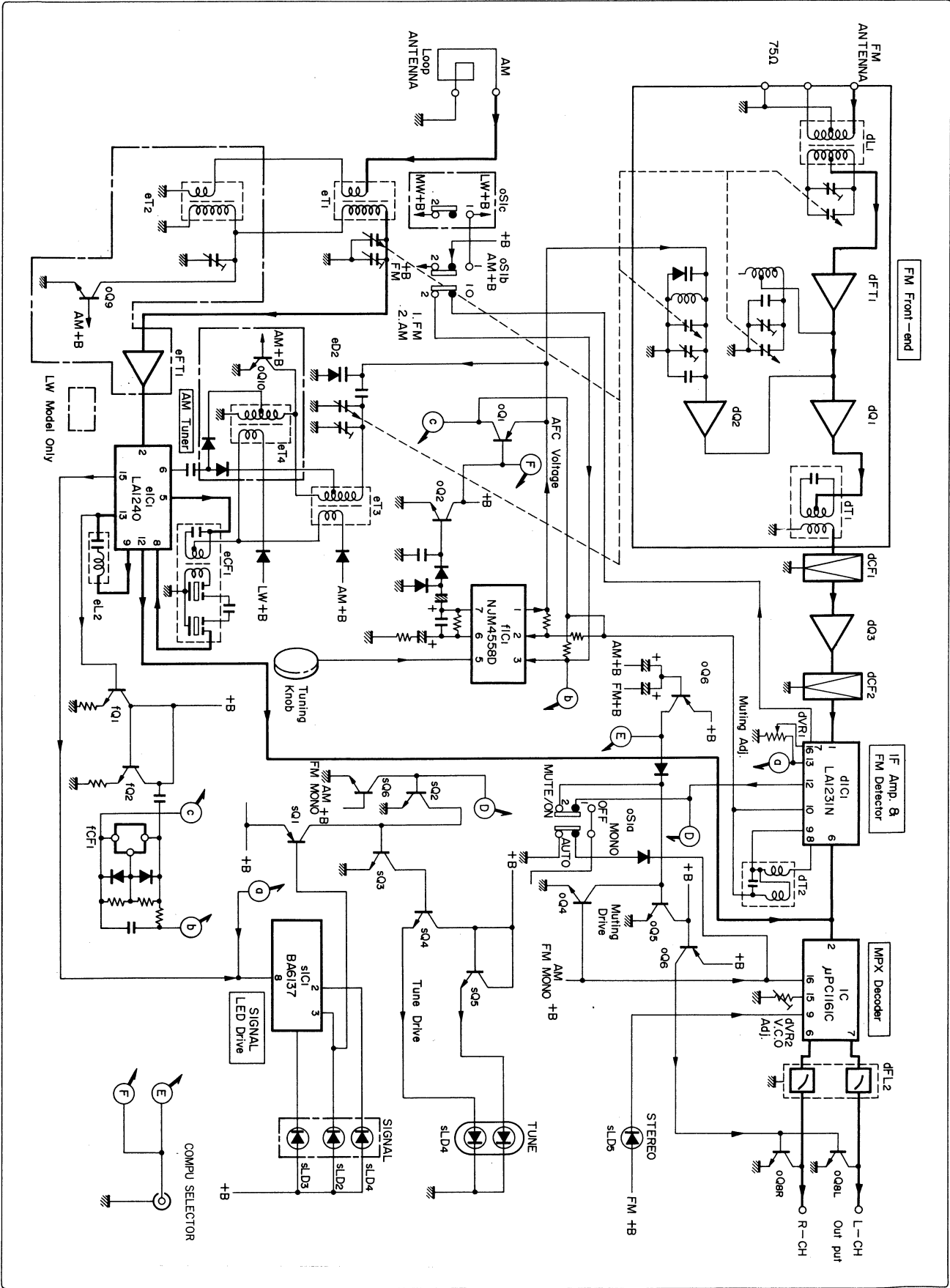
Tuning range	
MW	530 to 1,600 kHz
LW	150 to 350 kHz
Usable sensitivity	
MW	50 dB/m (316 μ V/m)
LW	62 dB/m
Signal to noise ratio	45 dB
Image response ratio	
MW	42 dB at 1,000 kHz
LW	35 dB at 250 kHz

Others

Output voltage and impedance	600 mV/2.2 kilohms
Power requirements	220/240V
For U.S.A. and Canada	120V (60 Hz)
Power consumption	6W
Dimensions	345 mm (13-5/8") W
H	46 mm (1-13/16")
D	234 mm (9-1/4")
Weight	2.0 kg (4.4 lbs) net
Packed	2.6 kg (5.7 lbs)

* Design and specifications subject to change without notice for improvements.

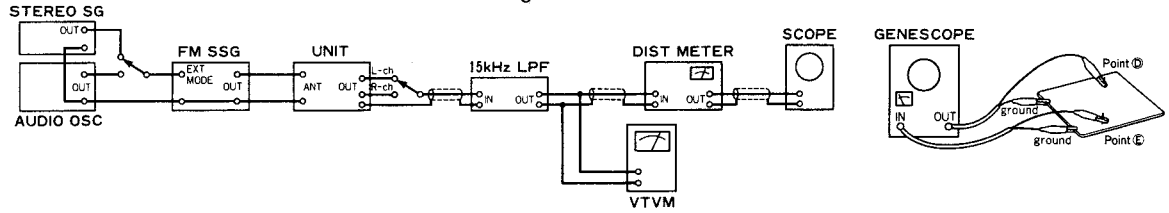
1. BLOCK DIAGRAM



2. ADJUSTMENTS

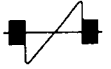
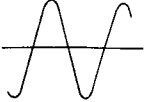
2-1. FM Adjustment (See Top View on Page 7)

Fig. 2-1



1) FM IF, RF Adjustment and Dial Calibration

- Note: 1. SELECTOR..... FM
2. FM MODE..... MONO

STEP	SUBJECT	FEED SIGNAL		MEASURE OUTPUT	ADJUST	ADJUST FOR	REMARKS
		FROM	TO				
1.	IF Coil Adj.	98MHz ANT Input 20dBf (14.8dB), 1kHz (100% MOD.), FM SSG	ANT terminal 300Ω	Between Point ④ (sR13, F-3963) & Ground, DC Volt Meter	dT1 (F-3963)	MAX. DC Volt	
2.	Discriminator Coil Adj. In case of using Genescope	1 No Input	—	Between Point ③ & ⑤ DC Volt Meter (Across dR30, F-3963)	dT2 (F-3963)	DC 0V ± 30mV	<ul style="list-style-type: none"> Repeat procedures as stated in subject 1 & 2. 
		2 Output 50dB, Genescope	Point ① (dR3)	Between Point ③ (dC25, F-3963) & Ground	dT2 (F-3963)	Steep linearity of S-curve. Make symmetrical S-curve.	
	Discriminator Coil Adj. In case of Dist meter	1 No Input	—	Between Point ③ & ⑤, DC Volt Meter	dT2 (F-3963)	DC 0V ± 30mV	<ul style="list-style-type: none"> Repeat procedures as stated in subject 1 & 2. Since the dT1 has already adjusted, perform only a fine adjustment in this procedure.
		2 98MHz ANT Input 65dBf (59.8dB), FM SSG	ANT terminal 300Ω	OUTPUT L-CH or R-CH, Dist Meter	dT2, dT1 (F-3963)	MIN. THD	
3.	88 MHz Dial Calibration	88 MHz ANT Input 65 dBf (59.8 dB), 1 kHz (100% MOD.), FM SSG	ANT Terminal 300Ω	OUTPUT L-CH or R-CH, SCOPE	dL3 (F-3963)	MAX. Output	<ul style="list-style-type: none"> Short between the point ① (dR3) and the ground. Repeat procedures as stated in step 3 & 4.
4.	108 MHz Dial Calibration	108 MHz ANT Input 65 dBf (59.8 dB), 1 kHz (100% MOD.), FM SSG	Same as above	Same as above	dTC3 (F-3963)	Same as above	
5.	88 MHz RF Adj.	88 MHz ANT Input Minimum value with sine wave 1 kHz (100% MOD.), FM SSG	Same as above	Same as above	dL1, dL2 (F-3963)	MAX. Output	
6.	108 MHz RF Adj.	108 MHz ANT Input Minimum value with sine wave 1 kHz (100% MOD.), FM SSG	Same as above	Same as above	dTC1, dTC2 (F-3963)	Same as above	

2) FM STEREO Adjustment (See Top View on Page 7)

Note: 1. SELECTOR..... FM
2. FM MODE..... AUTO

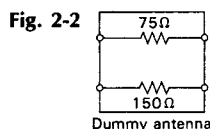
STEP	SUBJECT	FEED SIGNAL		MEASURE OUTPUT	ADJUST	ADJUST FOR	REMARKS
		FROM	TO				
1.	PLL VCO Adj.	98MHz ANT Input 65dBf (59.8dB), FM SSG, Pilot 19kHz (9% MOD.), R or L MODE 1kHz+Pilot (100% MOD.), STEREO SG	ANT terminal 300Ω	STEREO Indicator	dVR2 (F-3963)	Light indicator	• Adjust the dVR2 within center of lighting level.
	PLL VCO Adj. In case of using Freq. counter	98MHz ANT Input 65dBf (59.8dB), FM SSG, No MOD.	Same as above	Between Point ① (Pin No. 9 of dIC2) & Ground, Freq. counter	dVR2 (F-3963)	19kHz ± 50Hz	
2.	Muting level Adj.	98MHz ANT Input 22dBf (16.8dB), FM SSG, Pilot 19kHz (9% MOD.), L or R MODE 1kHz+Pilot (100% MOD.), STEREO SG.	Same as above	STEREO indicator or OUTPUT L-CH or R-CH, VTVM & SCOPE	dVR1 (F-3963)	STEREO indicator turns ON or Output Signal comes out	

◆ ADJUSTMENT FOR FM

- There are two kind in indication of FM SG output attenuator
 - Attenuator with marking of 75Ω open open indication type.
 - Attenuator with marking of 75Ω load or close load or close indication type.
- FM SG output level in this FM adjustment are described as open indication type.
- To feed FM signal, a dummy antenna circuit as Fig. 2-2 must be connected between FM SG output and ANT terminal (300Ω) of the unit.

- The following table shows relations among FM SG attenuator indication (dB), available power ratio (dBf) and antenna terminal voltage (dB/μV) in each indication type.

	FM SG Attenuator Indication	Available Power Ratio	Antenna Terminal Voltage
Open indication type	0 dB 66 dB	−0.8 dBf 65.2 dBf	−6 dB/μV 60 dB/μV
Load or close indication type	0 dB 60 dB	5.2 dBf 65.2 dBf	0 dB/μV 60 dB/μV



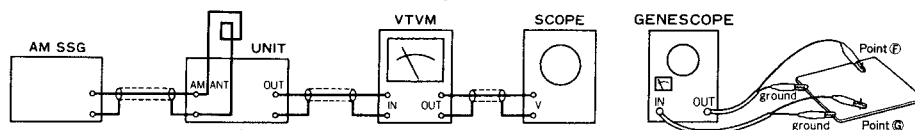
• Abbreviations

Equipment	Others
AM FM Generator Oscilloscope	Antenna ANT.
AM Standard Signal Generator	Modulation MOD.
FM Standard Signal Generator	Total Harmonic Distortion T.H.D.
FM Stereo Generator	
Oscilloscope	
Audio Oscillator	
Distortion Meter	
Genescope	
AM SSG	
FM SSG	
Stereo SG	
Scope	
Audio Osc.	
Dist. Meter	

2-2. AM Adjustment (See Top View on Page 7)


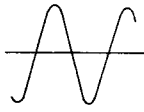
- Note:** 1. SELECTOR AM
2. Connect the AM Loop antenna to the AM antenna terminal and GND terminal.

Fig. 2-3



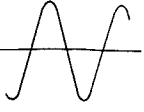
1) AM IF, RF Adjustment and AM (MW) Dial Calibration

Note: Selector MW <T-M55L>

STEP	SUBJECT	FEED SIGNAL		MEASURE OUTPUT	ADJUST	ADJUST FOR	REMARKS
		FROM	TO				
1.	IF Coil Adj.	Output 60 dB, Genescope	Point ① (eTC2 F-3963)	Between Point ② (eR6, F-3963) & Earth	eCF1, eL2 (F-3963)	MAX. Waveform	
2.	600kHz Dial Calibration	600kHz ANT Input 60dB, 400Hz (30% MOD.), AM SSG	ANT terminal	OUTPUT L-CH or R-CH, VTVM & SCOPE	eT3 (F-3963)	MAX. Output	<ul style="list-style-type: none"> • Short between the Point ① (oR3) and the ground. • Repeat procedures as stated in step 2 & 3.
3.	1400kHz Dial Calibration	1400kHz ANT Input 60dB, 400Hz (30% MOD.), AM SSG	Same as above	Same as above	eTC3 (F-3963)	Same as above	
4.	600kHz RF Adj.	600kHz ANT Input 30dB, 400Hz (30% MOD.), AM SSG	Same as above	Same as above	eT1 (F-3963)	Same as above	
5.	1400kHz RF Adj.	1400kHz ANT Input 30 dB, 400Hz (30% MOD.), AM SSG	Same as above	Same as above	eTC2 (F-3963)	Same as above	

2) LW Dial Calibration <T-M55L Only>

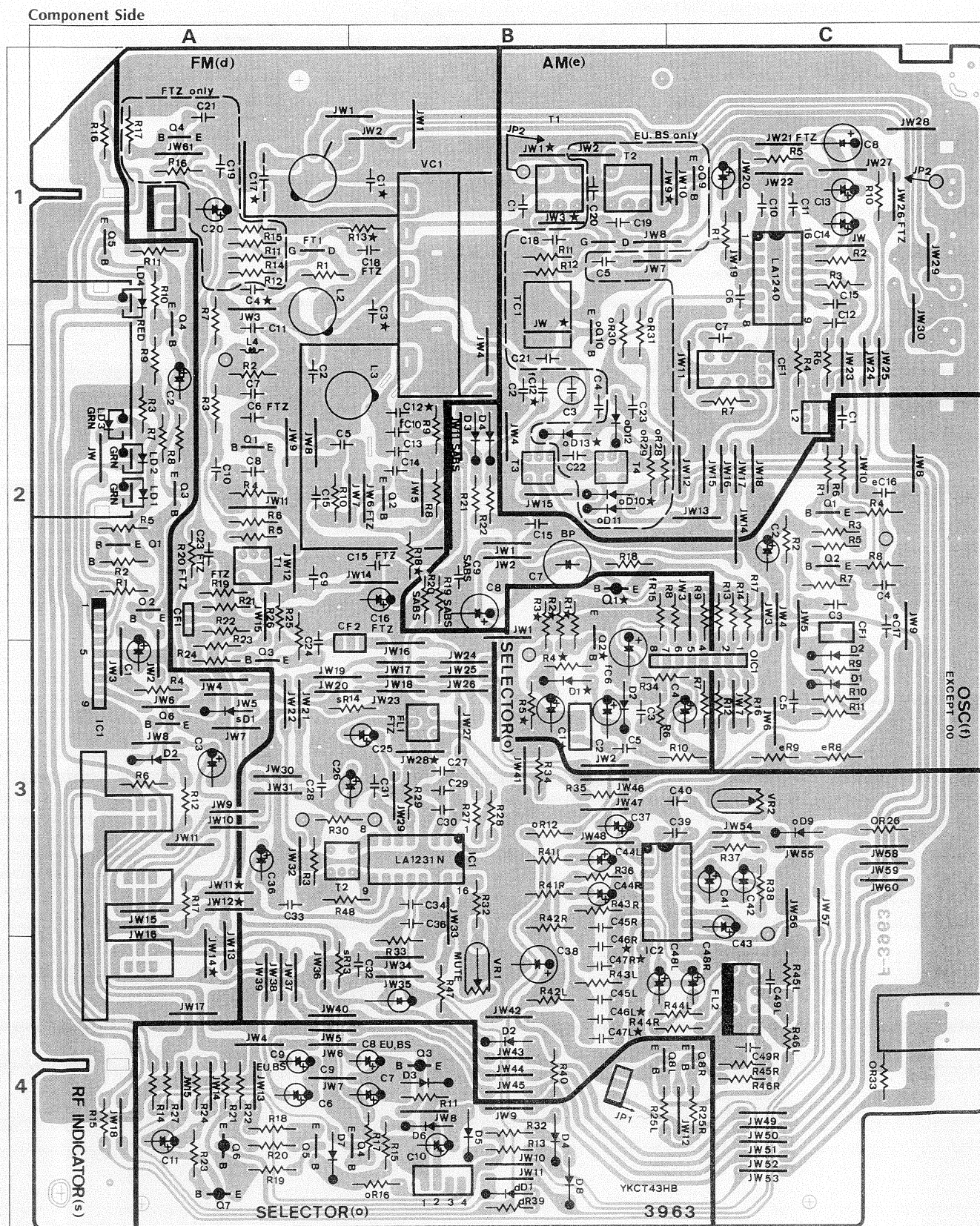
Note: Selector LW

STEP	SUBJECT	FEED SIGNAL		MEASURE OUTPUT	ADJUST	ADJUST FOR	REMARKS
		FROM	TO				
1.	170kHz Dial Calibration	170kHz ANT Input 60dB, 400Hz (30% MOD.), AM SSG	ANT terminal	OUTPUT L-CH or R-CH, VTVM & SCOPE	eT4 (F-3963)	MAX. Output	<ul style="list-style-type: none"> • Short between the Point ① (oR3) and the ground. • Repeat procedures as stated in step 1 & 2.
2.	300kHz Dial Calibration	300kHz ANT Input 60dB, 400Hz (30% MOD.), AM SSG	Same as above	Same as above	eTC1b (F-3963)	Same as above	
3.	170kHz RF Adj.	170kHz ANT Input 40dB, 400Hz (30% MOD.), AM SSG	Same as above	Same as above	eT2 (F-3963)	MAX. Output	
4.	300kHz RF Adj.	300kHz ANT Input 40dB, 400Hz (30% MOD.), AM SSG	Same as above	Same as above	eTC1a (F-3963)	Same as above	

3. PARTS LOCATION & PARTS LIST

3-1. F-3963 FM/AM Tuner Circuit Board (Stock No. 00744101 = T-M55/00744105 = T-M55L)

*Since some of capacitors and resistors are omitted from parts lists in this service manual, refer to the Common Parts List for capacitors & resistors, which was issued on February 1983.



Parts List < F-3963 >

Parts No.	Stock No.	Description
•Transistor		
dQ1	46393201	2SC2786
dQ2	46392400	2SC2668
dQ3	46393201	2SC2786
•FET		
dFT1	46393000 or 46393001	2SK192A-Y 2SK192A-GR
•IC		
dIC1	07191200	LA1231N
dIC2	03609900	μPC1161C3
•Diode		
dD1	46086000 or 03117600	1S1588 1S2473
dD2	46086000 or 03117600	1S1588 1S2473
dVC1	46223300	Variable Capacitor
dCF1	09106410	Ceramic Filter 10.7 MHz
dCF2	09106410	Ceramic Filter 10.7 MHz
dFL2	46151300	Low Pass Filter (38 kHz)
dL1	42007200	FM RF Coil
dL2	42103400	FM RF Coil
dL3	42204000	FM OSC Coil
dL4	46541600	Inductor 2.2μH
dT1	46369500	FM IF Coil
dT2	46547400	FM Detector Coil
dVR1	07241300	10kΩ(B) S.V.R, Mute Level adj.
dVR2	07218000	6.8kΩ(B) S.V.R, PLL VCO adj.
•FET		
eFT1	46393000 or 46393001	2SK192A-Y <T-M55L Only> 2SK192A-GR <T-M55L Only>
•IC		
eIC1	03608000	LA1240
eTC1	46370700	Timmer Capacitor 16pF <T-M55L Only>
eCF1	07250500	Ceramic Filter (455 kHz)
eT1	46260600	AM RF Coil
eT2	46260700	LW RF Coil <T-M55L Only>
eT3	46369300	AM OSC Coil
eT4	46369400	LW OSC Coil <T-M55L Only>
eL2	46369600	AM IF Coil
•Transistor		
fQ1	46392401	2SC2668
fQ2	46392401	2SC2668
•IC		
fIC1	46078900	M5218L
•Diode		
fD1	46421600	OA90M
fD2	46421600	OA90M
•Varactor Diode		
fD3	07299300	1S2236
fD4	07299300	1S2236
fC7	08460100	100μF 6.3V E.B.
fCF1	46223400	Ceramic Filter (455 kHz)
•Transistor		
oQ1	46367201 or 46367001 or 46392001	2SA1048 2SA1115 2SA1175

Parts No.	Stock No.	Description
oQ2	46367300 or 46367301 or 46367101 or 46391901	2SC2458 2SC2458 2SC2603 2SC2785
oQ3	46392001 or 46367001 or 46367201	2SA1175 2SA1115 2SA1048
oQ4	46367301 or 46367101 or 46391901	2SC2458 2SC2603 2SC2785
oQ5	46367301 or 46367101 or 46391901	2SC2458 2SC2603 2SC2785
oQ6	46392001 or 46367001 or 46367201	2SA1175 2SA1115 2SA1048
oQ7	46392001 or 46367001 or 46367201	2SA1175 2SA1115 2SA1048
oQ8	46367301 or 46367101 or 46391901	2SC2458 2SC2603 2SC2785
oQ9	46540801	2SC2878 <T-M55L Only>
oQ10	46540801	2SC2878 <T-M55L Only>
•Diode		
oD1	03117600 or 46086000	1S2473 1S1588
oD2	03117600 or 46086000	1S2473 1S1588
oD3	03117600 or 46086000	1S2473 1S1588
oD4	03117600 or 46086000	1S2473 1S1588
oD5	03117600 or 46086000	1S2473 1S1588
oD6	03117600 or 46086000	1S2473 1S1588
oD7	03117600 or 46086000	1S2473 1S1588
oD8	03117600 or 46086000	1S2473 1S1588
oD9	03117600 or 46086000	1S2473 1S1588
oD10	03117600 or 46086000	1S2473 <T-M55L Only> 1S1588 <T-M55L Only>
oD11	03117600 or 46086000	1S1473 <T-M55L Only> 1S1588 <T-M55L Only>
oD12	03117600 or 46086000	1S2473 <T-M55L Only> 1S1588 <T-M55L Only>
oD13	03117600 or 46086000	1S2473 <T-M55L Only> 1S1588 <T-M55L Only>
oS1	46547900	Push SW., FM/MW/LW (Selector)•FM MODE <T-M55L>
	46547800	Push SW., FM/AM (Selector)•FM MODE <T-M55>
oJ1	46547200	Mini Jack, COMPU SELECTOR
	46547300	ANTENNA Terminal Board (4P)
•Transistor		
sQ1	46367201 or 46367001 or 46392001	2SA1048 2SA1115 2SA1175
sQ2	46367301 or 46367101 or 46391901	2SC2458 2SC2603 2SC2785
sQ3	46367301 or 46367101 or 46391901	2SC2458 2SC2603 2SC2785
sQ4	46367301 or 46367101 or 46391901	2SC2458 2SC2603 2SC2785
sQ5	46367301 or 46367101 or 46391901	2SC2458 2SC2603 2SC2785
sQ6	46367301 or 46367101 or 46391901	2SC2458 2SC2603 2SC2785

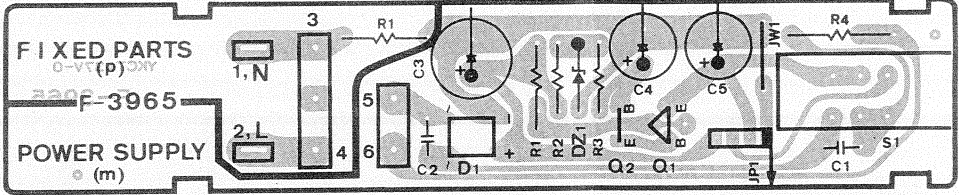
Parts List < F-3963 >

Parts No.	Stock No.	Description
•IC		
sIC1	46197200	BA6137
•Diode		
sD1	03117600 or 46086000	1S2473 1S1588
sD2	03117600 or 46086000	1S2473 1S1588

Parts No.	Stock No.	Description
•Light Emitting Diode		
sLD1	07250900	TLG-123A (Green)
sLD2	07250900	TLG-123A (Green)
sLD3	07250900	TLG-123A (Green)
sLD4	46095200	TLR-123 (Red)

3-2. F-3965 Power Supply Circuit Board (Stock No. 00744401)

Component Side



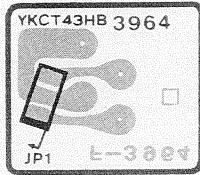
Parts No.	Stock No.	Description
•Transistor		
mQ1	03083901	2SD 313AL
mQ2	03059501 or 03068301 or 07194801	2SC 945 2SC2320 2SC1815

Parts No.	Stock No.	Description
•Diode		
mD1	46273600	DBB10-B
•Zener Diode		
mDZ1	46104100	O5Z13-Z
mS1	46370900	Push SW., POWER

•Note: The circuit boards, F-3964 & F-3648 are not supplied as the assembled. However, the individual parts on the circuit board are provided by orders.

3-3. F-3964 Output Terminal Circuit Board

Component Side



Parts No.	Stock No.	Description
	46438100	Output Terminal (2P)

3-4. F-3648 Dial Pointer L.E.D. Circuit Board

Parts List

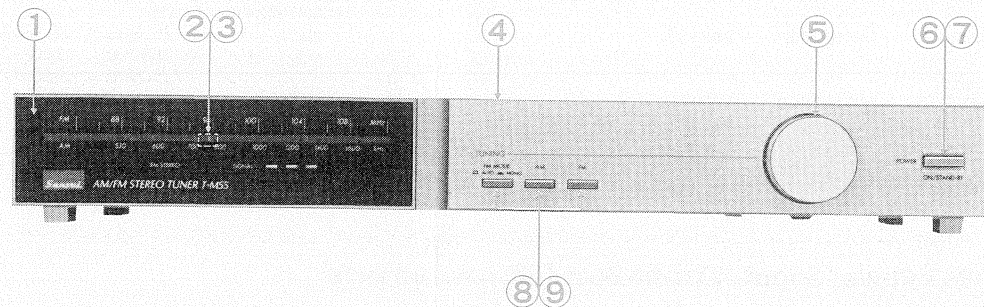
Parts No.	Stock No.	Description
•Light Emitting Diode		
sLD5	46198900	SLP-520D

•Abbreviations

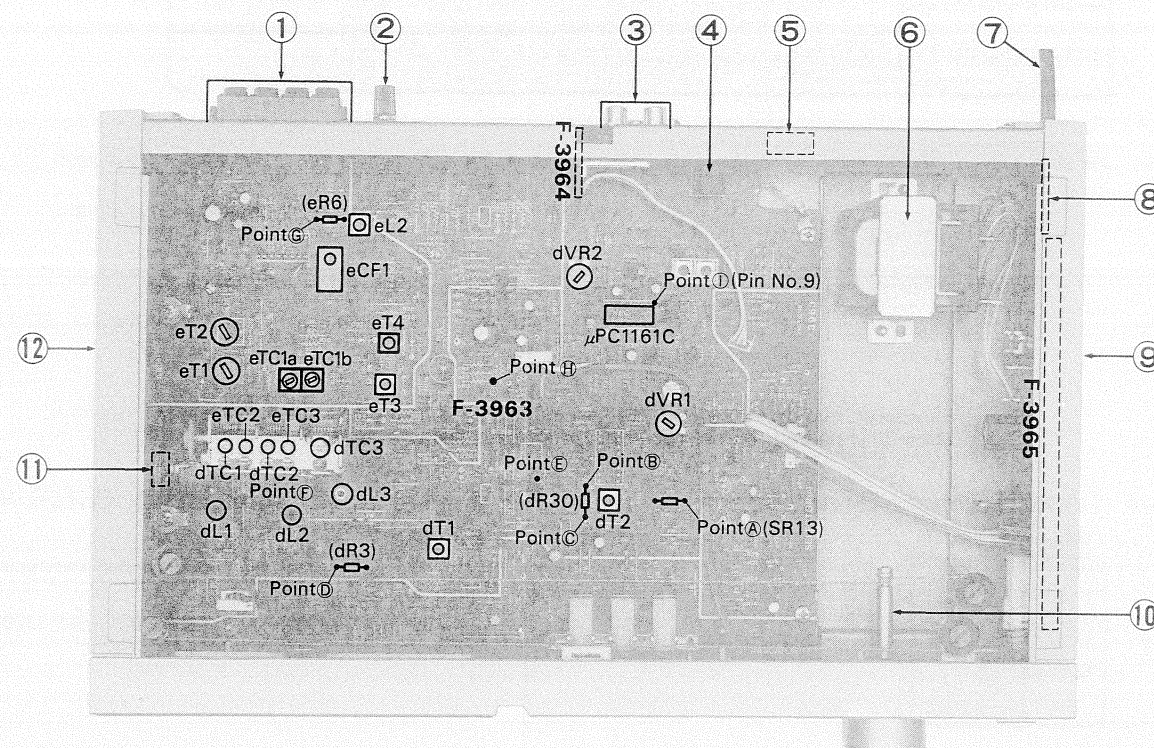
C.R. : Carbon Resistor	E.B. : Bi-Polar Electrolytic Capacitor
S.R. : Solid Resistor	E.B.L. : Low Leak Bi-Polar Electrolytic Capacitor
Ce.R. : Cement Resistor	Ta.C. : Tantalum Capacitor
M.R. : Metal Film Resistor	F.C. : Film Capacitor
F.R. : Fusing Resistor	M.P. : Metalized Paper Capacitor
N.I.R. : Non-Inflammable Resistor	P.C. : Polystyrene Capacitor
C.C. : Ceramic Capacitor	G.C. : Gimmic Capacitor
C.T. : Ceramic Capacitor, Temperature Compensation	V.R. : Variable Resistor
E.C. : Electrolytic Capacitor	S.V.R. : Semi Variable Resistor
E.L. : Low Leak Electrolytic Capacitor	SW. : Switch

4. OTHER PARTS

4-1. Front View



4-2. Top View



Parts List <Front View>

Parts No.	Stock No.	Description
1	47179500	Front Panel Ass'y <T-M55>
2	47179600	Front Panel Ass'y <T-M55L>
3	07856500	Dial Pointer
4	46198900	L.E.D., Dial Pointer
5	47178400	Bonnet
6	47176900	Tuning Knob
7	46370900	Push SW., POWER
8	47168800	Push Knob, POWER
9	46547800	Push SW., FM/AM (Selector)•FM MODE <T-M55>
	46547900	Push SW., FM/MW/LW (Selector)•FM MODE <T-M55L>
	47212800	Push Knob, FM/AM (MW)/(LW) (Selector)•FM MODE

Parts List <Top View>

Parts No.	Stock No.	Description
1	46547300	Antenna Terminal Board (4P)
2	22301510	GND Terminal
3	46438100	Output Terminal Board (2P)
4	46547200	Mini Jack, COMPU SELECTOR
5	07204700	Slide SW., Voltage Selector <220/240V T-M55L Only>
6	15011501	Power Transformer <T-M55>
7	15011505	Power Transformer <T-M55L>
8	38005400	Power Supply Cord <T-M55>
9	38004500	Power Supply Cord <T-M55L>
10	47168600	AC Cord Cover
11	47228200	Side Panel (Right)
12	47177500	Tuning Unit
	47169300	Pulley
	47228100	Side Panel (Left)

5. THREADING OF DIAL CORD

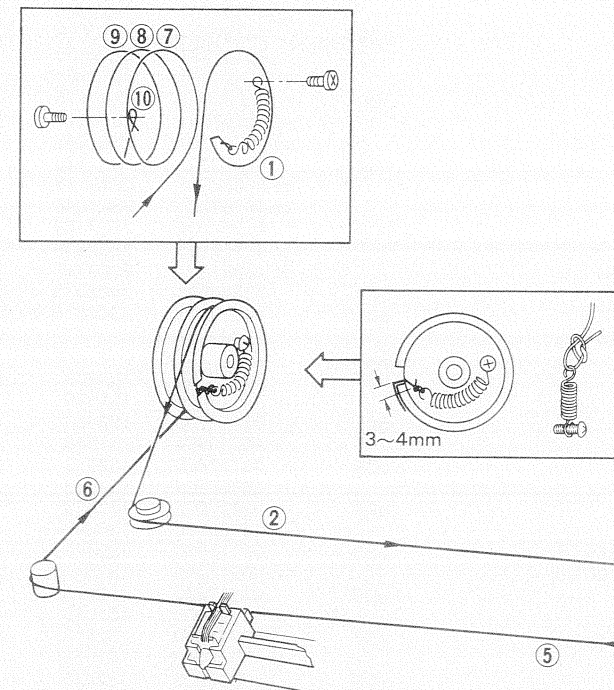
- If a dial cord is cut off or slips, replace it by following procedures. As this unit uses 0.5 mmφ cord, please replace it with the same type certainly.
- The length of dial cord is approximately 100cm.

5-1. Threading of Dial Cord

Thread the dial cord in numerical order from ① to ⑩ as Fig. 5-1.

- Close the variable capacitor completely.
- * Dial Cord (0.5mmφ) (Stock No. 60360530)

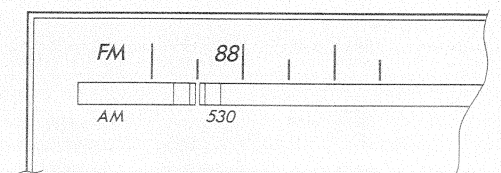
Fig. 5-1



5-2. Attachment of Dial Pointer

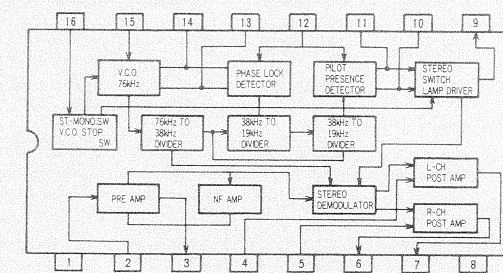
- Close the variable capacitor completely.
 - Set the dial pointer to the start point, the line at the left end of the dial scale. (Fig. 5-2)
- * Confirm that the dial pointer runs smoothly on the dial scale by turning the tuning shaft.

Fig. 5-2

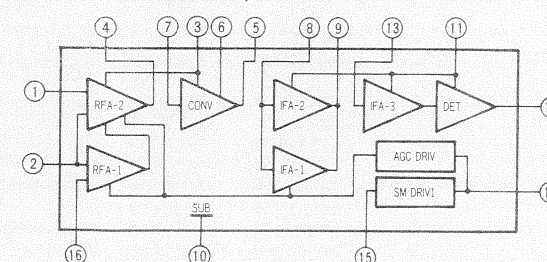


6. INTERIOR BLOCK DIAGRAM OF IC

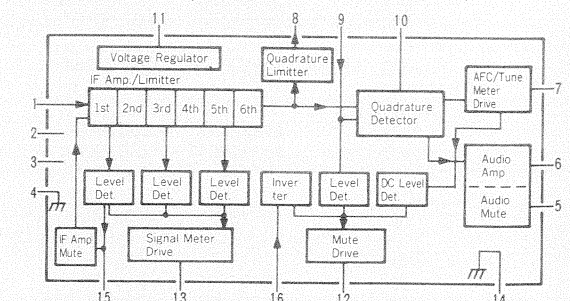
•μPC1161C (MPX IC)



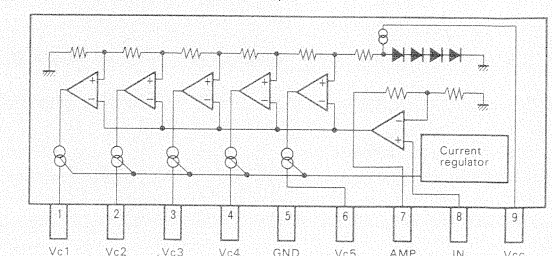
•LA1240 (AM Tuner IC)



•LA1231N (IF & Quadrature Detector IC)

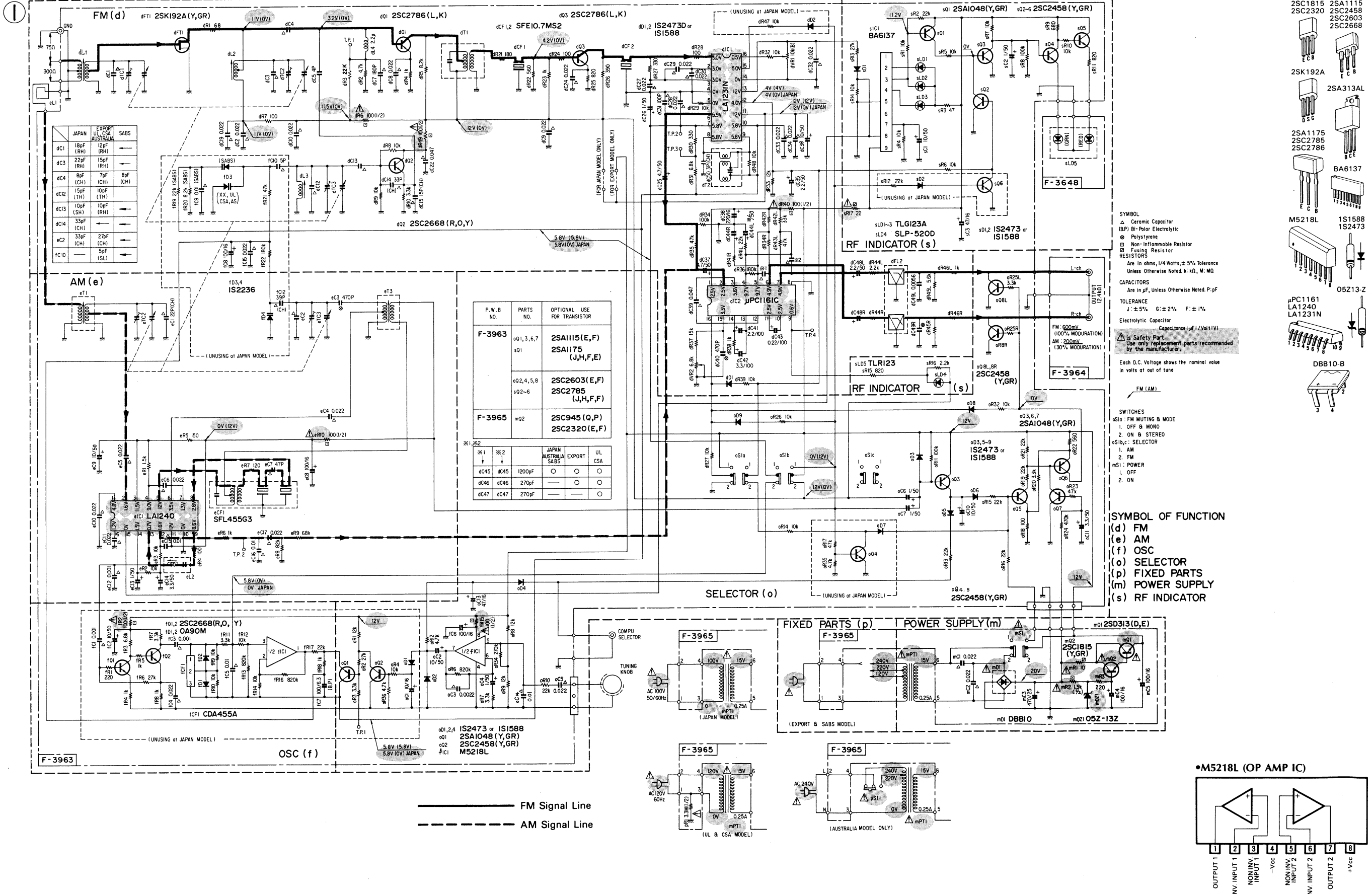


•BA6137 (L.E.D. Drive IC)



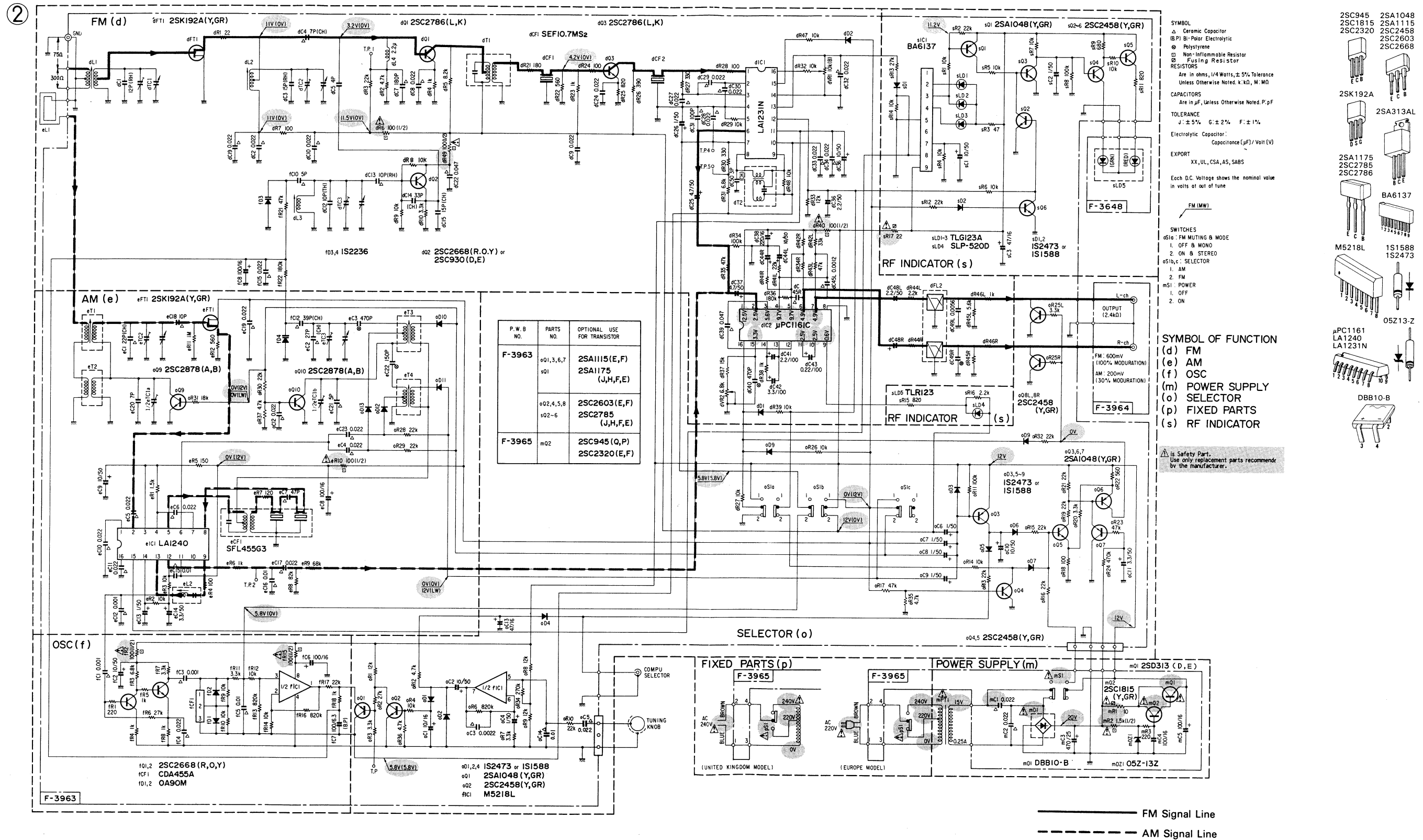
7. SCHEMATIC DIAGRAM 7-1. T-M55

*Design and specifications subject to change without notice for improvement.
 *La présentation et les spécifications sont susceptibles d'être modifiées sans préavis par suites d'améliorations éventuelles.
 *Änderungen, die dem technischen Fortschritt dienen, bleiben vorbehalten.



7-2. T-M55L

*Design and specifications subject to change without notice for improvement.
 *La présentation et les spécifications sont susceptibles d'être modifiées sans préavis par suites d'améliorations éventuelles.
 *Änderungen, die dem technischen Fortschritt dienen, bleiben vorbehalten.



1

2

3

4

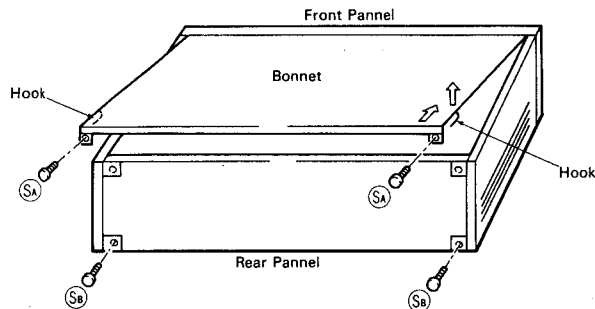
5

8. MAIN PARTS REPLACEMENT


A. Bonnet (See Fig. 8-1)

- 1). Remove two screws .
- 2). Push the rear side of the bonnet to remove the hooks and then remove bonnet.

Fig. 8-1



B. Bottom Plate

- 1) Remove two screws  (Fig. 8-1).
- 2). Push the rear side of the bonnet or remove the hooks and then remove bottom plate.

C. Side Panel R (L) (See Fig. 8-2)




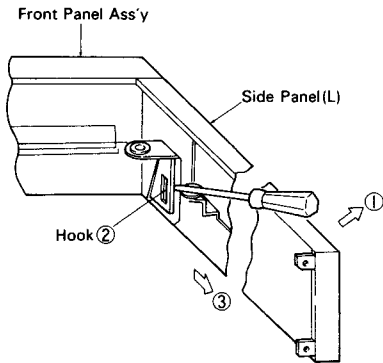
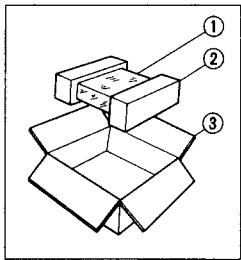
- 1). Remove bonnet and bottom plate.
- 2). Shift the position of the side panel R (L) 1.5 cm in the arrow direction .
- 3). Remove the hooks  of the side panel from front panel and then pull it the arrow direction  to remove the side panel R (L).

Fig. 8-2



9. PACKING LIST

Parts No.	Stock No.	Description
1	07805200	Vinyl Cover
2	47178200	Styrofoam Packing
3	47177000	Carton Case <T-M55>
	47184400	Carton Case <T-M55L>



10. ACCESSORY LIST

Stock No.	Description
46557200	Operating Instruction <T-M55>
46561500	Operating Instruction <T-M55L>
46051700	FM Antenna
46186100	AM Loop Antenna
07563000	Antenna Holder
38103200	PJP Cord
46267300	Mini Plug Cord